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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,888	03/27/2001	Dong-Yun Kim	8836-127 (IB9121-US)	2452

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EXAMINER	
CONNOLLY, MARK A	

ART UNIT	PAPER NUMBER
2115	

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/818,888	KIM, DONG-YUN	
	Examiner	Art Unit	
	Mark Connolly	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

2. Claim 1 is objected to because of the following informalities: The "power-down instruction" found on page 10 line 22 should be corrected to specify a "power-up instruction." The examiner has interpreted the instruction as such. Appropriate correction is required.

3. Claim 7 is objected to because of the following informalities: The "fist clock signal" on page 12 line 13 should be corrected to specify a "first clock signal." Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokouchi et al [Yokouchi] US Pat No 5426755 in view of Hlasny US Pat No 6044282.

6. Referring to claim 1, Yokouchi teaches the invention substantially including:

a. a first clock generator for generating a first clock signal in response to enable and disable signals [col. 3 line 65-col. 4 line 9 and Fig. 1].

b. a second clock generator for genetating a second clock signal that is lower in frequency than the first clock signal [col. 3 line 65-col. 4 line 9 and Fig. 1].

c. supplying a second clock signal to a processor and disabling clock generation of a first clock from the first clock generator if the system is to enter a low power mode [col. 3 line 65-col. 4 line 9 and Fig. 1].

d. enabling a first clock from the first clock generator and supplying the first clock to a processor if the system is to enter a high power mode [col. 3 line 65-col. 4 line 9 and Fig. 1].

Yokouchi does not explicitly teach a decoder for decoding instructions to check whether the instructions are power-up or power-down instructions and generating control signals accordingly. In addition, Yokouchi does not explicitly teach generating a clock change end signal, which notifies the system that a second clock has been selected in order to allow the first clock generator to be disabled, and a wake-up end signal, which delays the first clock from being selected after the first clock generator has been enabled, both in response to control signals generated when power-down or power-up instructions are detected respectfully. In summary, Yokouchi does not teach waiting for the first clock to stabilize after the first clock generator has been enabled before selecting it and preventing the first clock generator from disabling until a

second clock has been selected, both in response to whether the system wants to enter a higher power mode or a lower power mode respectively.

Hlasny explicitly teaches turning on a clock generator then waiting a predetermined time before enabling the clock to be supplied to a circuit [col. 9 lines 58-64]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Yokouchi system to include the teachings of Hlasny because it would guarantee that after the first clock generator is enabled, that the first clock would be stable when being supplied to the processor. The enabling of the first clock is interpreted as the system entering a high power mode.

Although the Yokouchi-Hlasny system teaches delaying the enablement of the first clock after the first clock generator is enabled, the system does not explicitly teach preventing the first clock generator from disabling until the second clock has been selected. It is obvious that the Yokouchi-Hlasny system would in fact prevent the first clock generator from disabling until the second clock has been selected because the Yokouchi-Hlasny system is concerned with always supplying a stable clock to the processor and if the first clock generator is disabled while supplying a first clock to the processor, then there would be no stable clock being supplied to the processor.

7. Referring to claim 2, Yokouchi teaches an oscillator for generating a first clock signal and a switch for enabling/disabling operation [col. 4 lines 3-6].

8. Referring to claims 3 and 4, these is rejected on the same basis as set forth hereinabove.

9. Referring to claim 5, it is obvious that any of the components of the Yokouchi-Hlasny system could be constructed in one-chip of the processor in order to reduce size and cost.

10. Referring to claim 6, it is obvious that the Yokouchi-Hlasny system can be realized within CDMA modem chip because it is well known that mobile communication devices operate at different power levels which are governed by the speed of the clock signals being supplied to the devices and the Yokouchi-Hlasny system provides a means to provide those clock signals using minimal power consumption.

11. Referring to claim 7, this is rejected on the same basis as set forth hereinabove. Furthermore, because the wait time taught by Hlasny is controlled by a counter, it is obvious that the counter value will continue to count until the end time counter value is reached which specifies the required wait time

12. Referring to claim 8, Hlasny teaches waiting a time until the first clock is stable [col. 9 lines 58-64].

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Connolly whose telephone number is (703) 305-7849. The examiner can normally be reached on M-F 8AM-5PM (except every first Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Connolly
Examiner
Art Unit 2115

mc
March 18, 2004

THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100